

## SECTION 01010

## GENERAL REQUIREMENTS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings, General Provisions of the Contract, all other Division 1 Specification Sections and all specified Divisions 2 through 16 Specification Sections apply to this Section.

## 1.2 SUMMARY

Provide all labor, materials, equipment, environmental protections, superintendence and coordination necessary for the demolition, remodel and construction of the areas identified within and in accordance with the drawings and specifications. Contractor shall accomplish and provide proper coordination and sequencing of work in a manner approved by the Contracting Officer.

## 1.3 LOCATION OF WORK

The work shall be located on the Oklahoma Air National Guard Base at Tulsa International Airport, Tulsa, Oklahoma.

## 1.4 PRINCIPLE FEATURES OF THE WORK

As defined in the contract drawings and specifications.

## 1.5 ACCESS TO WORK AREAS

- A. Access shall normally be 7:00 a.m. to 5:30 p.m., Monday through Thursday (except federal holidays) unless specifically instructed, by the drawings and specifications, required and approved.
- B. The Contractor shall provide and maintain all necessary and required signs, barriers and barricades to provide safe working areas.

## 1.6 MATERIALS, DELIVERIES AND RESPONSIBILITIES

- A. Contractor shall provide and maintain temporary field office, storage facilities and trash receptacles as required to provide and conduct the work. All contracts in the excess of (59) fifty-nine calendar days will require a field trailer to be set and utilized on the ANG Base. The facilities shall remain in -place until completion and acceptance of the work and shall be located as coordinated with and approved by the Contracting Officer and Base Civil Engineer.
- B. Contractor shall have and bear the responsibility to schedule, accept, receive, load/unload and store materials and equipment for the work.
  - 1. Unless otherwise indicated, Contractor shall furnish all materials, equipment, work, apparatus, personnel, etc., to perform and accomplish all provisions and/or tasks required to provide a completed project. The Government's responsibility is to provide approvals, selections and coordination as indicated.
  - 2. No Government personnel and/or equipment are to be considered for use during construction.
- C. All reports, information and data requiring certification or testing shall be certified by an authorized officer or representative of the Manufacturer or Independent Testing Agency. The certifications and/or testing indicated are the responsibility of the Contractor.
- D. All clean-up Operations, dust control (including enclosures and/or partitions) and safety provisions shall be the responsibility of the Contractor. Clean-up and trash/debris removal shall be performed on a "daily basis". It shall be the responsibility of the contractor to maintain a clean job site.
- E. Contractor shall obtain all licenses and permits required for the demolition and/or construction work, inspection, testing and disposal of any/all materials indicated for removal and demolition.
- F. During periods of darkness, all parts and/or areas of construction shall be lighted by the Contractor in a manner approved by the Contracting Officer.

## 1.7 SALVAGE

Materials, accessories and components which are not indicated or specified to be relocated/reinstalled, be salvaged for the Government or to remain the property of the Government, shall become the property of the Contractor and promptly removed from the site.

## 1.8 TULSA ANG BASE REQUIREMENTS AND REGULATIONS

Contractor and contractor personnel shall become familiar with and obey Base regulations, shall keep and stay within the limits of the work (and avenues of ingress and egress/haul routes), and shall not enter any other areas unless required to do so and are authorized for such entry. Contractor equipment shall be conspicuously marked for identification. Additional requirements are specified in Section "Supplementary Requirements".

END OF SECTION 01010

## SECTION 01011

## SUPPLEMENTARY REQUIREMENTS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings, General Provisions of the Contract, all other Division - 1 Specification Sections and all specified Divisions 2 thru 16 Specifications Sections apply to this Section.

## 1.2 SUMMARY

The information contained and specified in this section is intended to be supplemental to any and all other specified data. The information shall serve the following purposes:

- A. Provide definitions to terms indicated and used in the Contract Documents.
- B. Provide information not otherwise specified and/or indicated for performance of the Work.
- C. Provide an "over-view" of data and information to be provided to the Contractor in the form of a "Contractor's Handbook/Guide".

## 1.3 DEFINITIONS

- A. General: Basic definitions related to construction products, materials and work are specified in Section "Reference Standards and Definitions".
- B. Contracting Officer: The Contracting Officer is the only person authorized to bind the government. (i.e. Change costs by deleting or adding work). References to approvals and selections by the Contracting Officer mean the approvals/selections are to be made by a designated Contracting Officer Representative (COR).
- C. Approving/Governing Authority: These terms are intended to mean and refer to the Contracting Officer, the COR or a person designated by the Contracting Officer.
- D. BCE: This term means Base Civil Engineer.
- E. A/E: Architect and/or Engineer, being the firm hired to perform the specified work.
- F. Architects: This term is not intended to indicate authority of the Architect to approve and/or disapprove, select, require, permit, etc., for this Work or Project.

## 1.4 STANDARD TULSA ANG BASE REQUIREMENTS FOR CONTRACTORS

The following data and information is included to provide additional Project contract administration requirements.

- A. CHANGES: All work will be in accordance with Plans, Specifications, Terms and Conditions of the Contract. Any proposed changes or alterations in the work having an effect of increasing or decreasing the amount of the contract will be submitted in writing to the Contracting Officer for Approval.
- B. GENERAL CONTRACTOR: Will provide at the Preconstruction Conference:
  - 1. Contractor's Mailing Address, Phone Number and FAX Number:
  - 2. Contractor's Project Manager:
  - 3. Contractor's Project Superintendent:
  - 4. Phone Number of Project Superintendent (and Pager Number if used):
  - 5. Project FAX Number: Contractor's Field Office Number:

C. COMMUNICATIONS, RELATIONSHIPS, AND QUALITY:

Channels of Communication - The following shall be adhered to for pay requests, submittals, changes and problems:

- 1. Contractor to BCE Representative, BCE to A/E Firm, A/E Firm to BCE, BCE to Contracting Officer, Contracting Officer to BCE, BCE to Contractor. All parties shall be involved in all changes, reviews, problems, or management to insure a "Team" concept for a quality Project. Discussions or decisions shall be copied to all involved.
- 2. Contractor's Handbook/Guide - Contractor's packet containing samples of forms and the actual forms and guidance on how to prepare these forms will be presented to the Contractor at the preconstruction conference. Extensive information regarding procedures, guidance, and coordination are contained in the packet and shall be read carefully. All forms may be reproduced.
- 3. Quality Control - The Contractor shall be responsible for quality control. Visits by designated government inspectors/observers are for quality assurance only and their appearance during construction does not mean approval of the work in progress. The required observance of tests and concealed work by the Architect and Government is for quality assurance.

D. PROGRESS, PLANNING, DOCUMENTATION, AND CONTROL:

- 1. Submission of Intended Progress

Contract Progress Schedule - A CPM (Critical Path Method) schedule must be submitted prior to commencement of work for any project that exceeds (59) fifty-nine calendar days. The CPM schedule must be marked up to indicate actual progress monthly and submitted with payment applications. If the project

falls more than 15 days behind the critical path, schedule is to be revised and resubmitted. The CPM schedule shall be located in the job office. The CPM will be in addition to the AF form 3064.

2. Time Extension Request - Must be justified and shall be submitted in writing for approval. An updated Contract Progress Schedule shall be submitted with any request for Time Extension. Contract completion date delay must be submitted within 30 days of the end of the month in which the delay occurred. The anticipated adverse weather delays are indicated below:

Month	Days	Note: Anticipated adverse weather delay days are based on information from the Tulsa District Corps of Engineers
January	7	
February	7	
March	8	
April	19	
May	10	
June	9	
July	7	
August	7	
September	7	
October	7	
November	6	
December	8	

3. Contract Progress Report - Shall be prepared by the Contractor as of the 1st and 15th of each month on AF Form 3065 and sent to the BCE within 2 days to identify weekly progress. Forms will be furnished in the Contractor's Handbook/Guide.

E. INSPECTION:

1. Concealed Work - Compliance with the plans and specification shall be adhered to. The A/E Firm and BCE inspectors shall inspect and approve all concealed work before covering and be notified in sufficient time to allow normal response (minimum of 72 hours advance notice). The Contractor's superintendent shall use good judgment for additional inspection items and promote quality and compliance before an inspection is required. Failure to notify the government prior concealing any work will result in the contractor, at no cost to the government, exposing any work that may be questionable to the BCE.
2. Tests To Be Performed -
  - a. Selection of Laboratory - BCE shall approve the selection of testing laboratories and the laboratory must be capable of performing all required tests. The Contractor shall submit a list of three (3) testing companies with one to be approved by BCE. The BCE shall select all test all locations. No test shall be performed with out the presence of the BCE Representative or prior approval to waive this requirement.

- b. Copies Required - One (1) original copy of all test reports will be provided to the Base Civil Engineer. Provide one (1) copy to the A/E firm.
  - c. Results - Test reports shall indicate "Passed" or "Failed" on each item.
- 3. Maintenance of As-Built and Job Site Records - Records (Plans, Specifications, Submittals, etc.) shall be maintained by the Superintendent for review by the BCE. The records shall be timely and accurate and shall be distance referenced from permanent landmarks and/or construction. Additional information is specified in article "AS-BUILT RECORDS".
- 4. Final Inspection & Acceptance - Pre-Final and Final Inspections will be made upon 48 hours minimum written notification. Pre-Final Inspection shall not be requested when numerous flaws or omitted work are evident. Government occupancy of the project will be granted upon final acceptance of the completed Project or Phase of the Project. Final inspection notice shall allow time for the Contracting Officer to attend. Final inspections shall not be conducted until all contractors' badges have been returned to Security Police and all contractual requirements and documentation are completed and approved. Final inspection will not be performed unless all items identified on the pre-final punch list have been corrected.
- 5. Plans and Specifications Review - The Contractor's superintendent or project manager shall carefully review all plans and specifications prior to the pre-final inspection to insure that all tests and work has been performed and final documents are acceptable for approval.

F. SUPERINTENDENCE BY CONTRACTOR

A responsible and knowledgeable employee of the Contractor shall be designated in writing as the Project superintendent. This superintendent shall be on site, shall supervise all work in progress, and shall act with Contractor authority on any possible emergency.

G. PASSES FOR EMPLOYEES & VEHICLES

Contact Security Police (Bldg. 501) for procedures on vehicle passes (918-833-7319). All employee passes will be approved by the BCE. Final payment to the general contractor will not be made at the completion of the construction project until all contractor badges have been returned.

H. CLEAN UP

- 1. Reference AF Form 3035 and specifications sections. Clean up shall be performed daily as specified.

2. The Contractor shall be responsible for jobsite cleanup for the entire project. A jobsite cleanup program shall be established and maintained throughout the project.
  3. Blowing debris shall be picked up and disposed of into a covered trash container on a minimum daily basis.
  4. All roadways littered with debris, dirt, rocks etc. by the contractor or sub-contractors shall be swept and kept clear of debris, dirt, construction materials, and other miscellaneous equipment immediately.
- I. GOVERNMENT PROPERTY OTHER THAN GFP: Reference AF Form 3035 and specifications and plans.
- J. OPERATION OF STORAGE AREAS:
1. Description & Use of Authorized Areas
    - a. Parking - As designated by Government. Contractor's personnel private vehicles shall be parked as directed by the BCE. Only valid, approved and required working vehicles shall be parked on the work site.
    - b. Storage of Materials - Materials shall be stored in an area as directed by the BCE. NOTE: the Contractor must secure all tools and items of value. Storage buildings, trailers or shelters shall be and/or are the Contractor's responsibility.
    - c. Pavement Protection - Contractor shall take all precautions not to damage pavement, sidewalks, curbs, gutters, etc.
  2. Authorized Use of Roadways and/or Streets - Limit haul routes directly to and thru the main gate. Reference plans for haul routes. All trucks or vehicles, such as concrete trucks or dump trucks shall be informed as to the job site location and warned not to approach any aircraft movement area. Violation of this will cause arrest and very high fines.
  3. Deliveries - Address all delivery tickets to the Contractor and reference the Project title. "Do not deliver to ANG Base Supply Shipping or Receiving". Base personnel will not accept materials and will not assist in unloading with personnel or equipment. All materials delivered to the ANG Base Supply will be sent back to the sender.
  4. Disposal - Off base disposal of refuse and construction debris will be the responsibility of the Contractor. Coordinate with Base Civil Engineer for salvage of equipment items. Contractor will provide an on-site dumpster at Contractor's expense. Contractor shall not use base dumpsters.
  5. Temporary Utilities - Utilities will be the responsibility of the contractors and normally are at no usage cost to the Contractor unless designated in the plans or



specifications. Temporary connections shall be coordinated and approved by the BCE prior to any actual connection. Cost of connection shall be the responsibility of the Contractor.

K. SAFETY: Refer to AF Form 3035 and bid documents.

1. Accidents - Contractor shall notify Safety Office and the BCE immediately for accidents requiring medical attention. The Contracting Officer shall be notified in writing within 3 days of the incident with a copy to the BCE.
2. Visitors - Unauthorized government visitors shall be discouraged.
3. Excavation - All excavation shall have lighted barriers placed around them at a minimum of one every five feet and be stepped for safety to comply at a minimum with OSHA directives. A digging permit shall be obtained from the Deputy BCE (833-7285) or Construction Inspector (833-7558 or 833-7790) prior to any digging or excavation. (This is defined as any ground penetration.)
4. Hearing Protection - When working on or near the aircraft ramp, ear protection may be required due to high noise levels during aircraft operations or during high noises generated by construction machinery. The Contractor's superintendent shall be responsible for enforcing their use. Earplugs or "bunny ears" may be used as appropriate.
5. Material Safety Data Sheet - (MSDS) on all substances must be given to the BCE Representative for all materials to be provided and/or installed prior to installation.
6. Construction Signs - Post signs where there is overhead work involved to notify personnel that there are hazards above. Consult the BCE for correct type and attachment of signage. Post a quality prime contractor sign in the work area as designed and indicated on ATTACHMENT 4 to this Section.
7. Overhead Work - Hard Hat areas shall be designated by the Contractor for all work done overhead with possible injuries to personnel below: Post appropriate signage.
8. Smoking - Is allowed only in designated smoking areas. Smoking is not allowed in any government facility.

L. FIELD CHECKS

One of the base construction inspectors will be on the job site daily to record progress. They will advise the Contractor's superintendent of their presence on the job site and will comply with hardhat requirements. Alternate BCE personnel may perform these duties during absences or for particular expertise.

M. MILITARY SECURITY:

1. Contractor's Workmen - Except as approved for the Work, no workmen shall leave the work area or interfere in the Unit's operation (not to include normal travel to and/or from parked vehicles). All Contractor employee problems shall be corrected off Base.
2. Perimeter Fence - Integrity of Base perimeter fencing shall be maintained at all times. The FAA has extremely high fines for this violation of airport regulations.
3. Vehicle Conflicts - Contractor shall notify and coordinate with Security Police to have vehicles moved from area that is going to be under construction.
4. Weekend Hours - Contractor shall coordinate and schedule with DBCE and Security Police when planning to work on weekends or holidays. Monthly UTA weekends will prohibit work. Coordinate with DBCE and utilize the form to be provided. The coordination and scheduling shall be accomplished no later than the 10 days preceding the weekend and/or holiday. The contractor will only be approved to work on weekends when the progress of the project is behind schedule or scheduling is required for utility shutdowns.
5. Contractor Badges - Shall be worn at all times.

N. APPROVAL OF SUBCONTRACTORS

The Contracting Officer shall make Approval of subcontractors. The Contractor, including addresses, phone numbers and insurance coverage, shall provide a complete list.

O. PAYMENTS

Refer to AF Form 3035 and Contractor's Handbook/Guide. One per month, and must coincide with a progress report.

P. UTILITIES

Refer to AF Form 3035, specifications and bid documents. A digging permit is required. Existing utility drawings and as-built drawings may be provided as a guide. Location and verification is always the Contractor's responsibility.

Q. WARRANTIES AND OPERATIONS & MAINTENANCE MANUALS:

1. Turn-in Procedure - Refer to specifications. Contractor shall completely accomplish original warranty form and a warranty submission cover letter (see Attachment No. 1 for example) for every piece of equipment, and submit in a three ring binder. Two additional copies of every warranty shall be submitted, with a three ring binder for each set. In addition, a copy of each warranty shall be included in the "Operations and Maintenance Manuals" attached to the

literature for the respective piece of equipment. O&M Manuals shall be submitted for review and approval when the project becomes (75%) seventy five percent complete. Failure to submit as directed will result in the disapproval of payment applications until the time that O&M manuals are approved.

2. Form 274 - Government will furnish Form 274 per Contractor's request when required quantity is established. Contractor shall accomplish and attach Optional Form 274 adjacent to the nameplate for each piece of equipment covered by a warranty. For architectural items the form shall be attached on the inside of a cover or at a location out of the normal line of sight.

#### R. FIRE SAFETY

Refer to AF Form 3035 and Base Fire Department guidance. All open flames or spark producing type work must have a fire permit prior to work (833-7283) and must be terminated 2 hours prior to end of work and be inspected. Coordinate with the Fire Department on Thursdays for weekend permits.

#### S. NOTICE TO PROCEED

Certificate of Insurance and performance bonds are required immediately for the "notice to proceed" to be issued. The Contract shall commence within 10 days after receipt of Notice to Proceed. Total Contract time allowed per the contract bid documents, starting with date of Notice to Proceed. Contract time allowed includes normal weather delays for this area. Reference Section 01300-1.3,3d, Notice to Proceed will not be issued until the requirements of this section are completed.

#### T. WEEKLY PROGRESS MEETINGS:

1. Schedule and administer meetings throughout progress of the work at one week intervals.
2. Attendance Required: Job superintendent, major Subcontractors and suppliers, Contracting Officer, as appropriate to agenda topics for each meeting. Subcontractors to attend shall be those presently working or will begin work before the next two progress meetings.

#### U. SUBMITTALS AND SAMPLES

Contractor shall submit a minimum of four (4) copies of each required submittal; A/E will retain one (1) copy; Two (2) copies will be retained by the Government and one (1) returned to the Contractor, marked with action taken and corrections or modifications required. (Submit six (6) copies when submittal is required for maintenance manuals).

#### V. CONTRACTOR'S DISPLAY BOARD

Reference remarks Section of AF Form 3035. Wage rates and equal employment opportunity posters must be posted for easy access on the job site.

## W. POINTS OF CONTACT:

1. USPFO Contracting Office – 3535 Military Circle, Oklahoma City, OK, 73111-4398, (405) 425-8221.
2. Base Civil Engineer (BCE) - 4200 N. 93<sup>rd</sup> East Ave., Tulsa, OK, 74115-1632, BLDG 222, (918) 833-7299, Mon - Thur 0700 - 1730 hrs.
3. Deputy Base Civil Engineer (DBCE) - 4200 N. 93<sup>rd</sup> East Ave., Tulsa, OK, 74115-1632, BLDG 222, (918) 833-7285, Mon - Thur 0700 - 1730 hrs.
4. Technical Inspector- 4200 N. 93<sup>rd</sup> East Ave., Tulsa, OK, 74115-1632, BLDG 222, (918) 833-7558 or (918) 833-7790, Mon - Fri 0730 hrs.
5. Safety - (918) 833-7266, Mon - Thur 0700 - 1730.
6. Fire Department - (918) 833-7283, Mon - Thur 0700 - 1730 hrs normally, BLDG 403.
7. Security - (918) 833-7321, Security is manned 24 hours per day, BLDG 501 annex.
8. Base Health/Environmental - (918) 833-7754, Mon - Thur 0700 - 1730 hrs, BLDG 420
9. Base Communications - (918) 833-7630, Mon - Thur 0700 - 1730 hrs, BLDG 230.
10. Base Contracting – 4200 N. 93<sup>rd</sup> East Ave., Tulsa, OK, 74115-1632, BLDG 402, (918) 833-7305 or (918) 833-7250 Mon - Thur 0700 - 1730 hrs.

## X. FURTHER COMMENTS ON ABOVE OR UNIQUE ITEMS:

1. Asbestos Non Use - A copy of the asbestos non-use forms shall be given to the Contractor and it is required that all subcontractors and project managers sign and return to the BCE. This shall be done within 15 days after the notice to proceed. Material Safety Data Sheets on all materials used on the projects must be submitted.
2. Correspondence - All correspondence shall have the contract number and project number on it.
3. Project Closeout - Final inspection and payment will require all work be completed and all badges be returned. A complete listing of all installed equipment shall be furnished to the Real Property Management Specialist at the conclusion of the Project. The listing shall include the cost of material, labor, etc., for each specified category of each facility per the Real Property Cost

Listing. Forms will be furnished to the Contractor, and the Contractor shall include equipment description, manufacturer, model number, and serial number. Complete and approved OM Manuals / Data are required prior to acceptance of the Project.

4. Hearing Protection - Proper ear protection shall be the Contractor's responsibility.
5. Stored Items for Payment - In summary, these should be on site and protected per manufacturer's recommendations. They shall be accessible and easily inventoried. Invoices shall accompany the payment request and be sent to the BCE 24 hours prior to the site visit to verify. This will be concurrent with a progress meeting. Invoices are necessary, as the government will not pay until the Contractor has paid for stored items. Stored items, on base, may be considered if justified, approved, and coordinated with BCE Inspector. The following conditions shall be met and acceptable to the Contracting Officer:
  - a. The Contractor shall demonstrate clear title (paid invoices) for the materials. (Payments will not be made for materials in transit).
  - b. The material shall be stored within reasonable proximity to the construction site.
  - c. The material shall be adequately insured and protected from theft.
  - d. The material shall not be susceptible to deterioration or physical damage in storage or in transit to the project.
6. Emergency Access - It is important to notify the ANG, Fire Chief 833-7283; Security 833-7321; and clinic 833- 7207, Senior Health Tech, when and what sections of pavements or streets or main building entrances are going to be blocked off. Before they are barricaded, access to buildings should also be coordinated with users.
7. Temporary Services - Portable toilets and all telephone business lines shall be provided by the Contractor. Contact Base Communication for information on how to have Bell Telephone access Base cables.
8. Fire Hydrant Use - Access and use of the fire hydrants must be coordinated through the Fire Dept., 833- 7283.
9. Airport Access - If Contractors intend to pass the Airport Perimeter Road on to the taxiway, the Airport Tower shall be notified prior to access. Radio control by the tower is essential for any access.
10. Medical Emergency – For medical emergencies requiring ambulance or fire department, dial 911.

## 11. Air Conditioning and Refrigeration Equipment Survey –

- a. Provide a completed NGB Form 88-4 as attached and submit to the Contracting Officer with project closeout documents.
- b. Instruction for Completion of Form:
  - 1) BASE: Fill in ANG installation name and state where it is located.
  - 2) FACILITY NUMBER: Fill in the building number where the survey takes places.
  - 3) UNIT: This is the designated unit number for this piece of equipment in accordance with the drawing or equipment layout plans.
  - 4) DESCRIPTION: Record type or common name of this piece of equipment, such as: Window Air Conditioning (A/C), Rooftop Unit, Unitary A/C, Fan Coil Unit, Chiller, Freezer, or Water Cooler. Record all water coolers as one piece of equipment per facility, but show the total number of units under comments.
  - 5) STATUS: This reflects the current disposition of the equipment item. Valid status indicators are: IN SERVICE, MOTHBALLED, UNDER REPAIR, or DECOMMISSIONED.
  - 6) CAPACITY: Fill in the number of tons (12,000 BTUH equals one ton).
  - 7) REFRIGERANT TYPE: Identify as CFC-11, CFC-12, CFC-22, CFC-113 or CFC-500 series.
  - 8) REFRIGERANT QUANTITY: This is the optimal amount of refrigerant needed to fill an empty piece of equipment. Take into consideration the cooling coil and refrigerant piping for some HVAC or refrigeration units. Review equipment nameplate and data sheet for additional information.
  - 9) MODEL: This is the model number assigned to the equipment by the manufacturer.
  - 10) MANUFACTURER: Record the manufacturer's name, such as Trane, York, or Carrier.
  - 11) DATE MANUFACTURED: Record the date the equipment was manufactured. If this information is not available, provide the equipment installation date or the best available date on record.

12) SERIAL NUMBER: Record the serial number assigned to the equipment. Check the nameplate for the information.

13) CONDITION ASSESSMENT: Use the numbers as defined below to indicate the status of the equipment at the time of the survey. This is the surveyor's best judgment and should not require a significant work effort such as an engineer's study.

1-- System is new or fully operational. No work required.

2 -- System is in operational condition. Routine preventive maintenance is required to preserve reliability.

3 -- System is in serious condition but the conditions are tolerable.

4 -- System is in intolerable condition. Major components have failed or failure is imminent. Replacement of the equipment should be considered at the earliest date.

## 1.5 SUPPLEMENTAL DATA

### A. As-Built Records

1. As-Built Record Drawings, Specifications and Submittals - Contractor shall maintain, at the jobsite, complete and up-to-date full-size Contract Documents marked to record any deviations that have been made from the original Contract Documents during the course of construction. These documents shall be available for review by the COR. Upon completion of the Work, submit the marked set of documents to the COR. Requests for partial payments shall not be approved if the marked documents are not kept current, and the request for final payment shall not be approved until the as-built documents are acceptable to the Contracting Officer.
2. Objects installed and not shown on the plans should be located by measurements to a permanent visible structure. Point locations not readily visible, such as underground water valve or pipe elbow, should be located by measurements to two permanent visible objects. Linear objects located parallel to permanent visible objects, should be measured and recorded at intervals of not more than 50-feet and at the end points of the linear object being located.

### B. Operation and Maintenance Manuals/Data

1. Contractor shall submit Operation and Maintenance (OM) data and/or manuals that are specifically applicable to this Contract and a complete and concise depiction of the provided equipment or product. Data containing extraneous

information to be sorted through to find applicable instructions will not be accepted. Provide information in sufficient detail to clearly explain user OM requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with Section 01300, "Submittals".

- a. Quantity - Submit two (2) copies of the manufacturers' information specified herein for the components, assemblies, subassemblies, attachments, and accessories. The items for which OM manuals are required are listed in the technical sections that specify that particular item.
  - b. Package Content - For each product, system, or piece of equipment requiring submission of OM data, submit the package required in the individual technical section. Package content shall be as required herein.
  - c. Delivery - Submit OM data to the COR for review, approval and acceptance; submit data specified for a given item within 30 calendar days after the item is delivered to the contract site (unless otherwise indicated and/or specified).
  - d. Changes to Submittals - Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the OM data. Changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.
2. Types of Information Required in OM Data Packages
- a. Operating Instructions - Include specific instructions, procedures, and illustrations for the following phases of operation:
    - 1) Safety Precautions - List personnel hazards and equipment or product safety precautions for all operating conditions.
    - 2) Normal Operations - Include data and instructions to explain operation requirements for maintenance.
    - 3) Service Requirements - Include instructions for maintenance services to be performed such as lubrication, adjustments, and inspection.
  - b. Preventive Maintenance - Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and repair.



- 1) Lubrication Data - Include lubrication data, other than instructions for lubrication in accordance with paragraph entitled "Service Requirements":
  - 2) A table showing recommended lubricants for specific temperature ranges and applications.
  - 3) Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities; and
  - 4) A lubrication schedule showing service interval frequency.
- c. Corrective Maintenance - Include manufacturer's recommendations on procedures and instructions for correcting problems and making repairs.
- 1) Maintenance and Repair Procedures - Include instructions and list tools required to restore product or equipment to proper condition or operating standards.
  - 2) Removal and Replacement Instructions - Include step-by-step procedures and list required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.
  - 3) Spare Parts and Supply Lists - Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. List spare parts and supplies that have a long lead time to obtain.
- d. Appendices - Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:
- 1) Parts Identification - Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number, which will cross-reference the

illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies.

- a) Manufacturer's standard commercial practice - The parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as a master parts catalog, in accordance with the manufacturer's standard commercial practice.
  - b) Other than manufacturer's standard commercial practice - End item manufacturer may add a cross-reference to implement components' assemblies and parts requirements when implementation in manual form varies significantly from the style, format, and method of manufacturer's standard commercial practice.
- 2) Warranty Information - List and explain the various warranties and include the servicing and technical precautions prescribed by the manufacturers or contract documents to keep warranties in force.
  - 3) Contractor Information - Provide a list that includes the name, address, and telephone number of the General Contractor and each subcontractor installing the product or equipment. Include local representatives and service organizations most convenient to the Project site. Provide the name, address, and telephone number of the product or equipment manufacturers.

#### C. Schedule of Values

- 1. Within 30 days following the Notice to Proceed, the Contractor shall prepare and submit to the Government for review and approval:
  - a. A schedule of the estimated values of each principal category of the work, when added together, equals the total contract price;
    - 1) The costs associated with preparatory work, overhead, profit, insurance, taxes, warranted, and permits shall be prorated into items of work throughout the "Schedule of Values".
    - 2) As-built Records, as defined in paragraph 1.5.A shall be a separate line item cost on the "Schedule of Values". The value shall be listed as a minimum of 0.5% of the total contract price.
    - 3) Performance and payment bond costs shall be a separate line item cost on the "Schedule of Values".

- 4) The operation and maintenance manuals (OM) as defined in paragraph 1.5.B, shall be a separate line item cost on the "Schedule of Values". The costs shall consist of costs associated with preparation work, obtaining the manuals, assembling the manuals, and any training that might be required to be given. The value shall be listed as a minimum of 0.5% of the total contract price.
  - 5) The Real Property Records as required in paragraph 1.4.X.3 shall be a separate line item cost on the "Schedule of Values". The value shall be listed as a minimum of 1% of the total Contract Price.
  - 6) Bond Costs, As-Built Records Costs, Real Property Records Costs and OM Manual Costs shall be listed as items one (1), two (2), three (3) and four (4) respectively on the "Schedule of Values".
  - 7) Submittals as required by the contract documents shall be a separate line item cost on the "Schedule of Values." The value shall be listed as a minimum of 2% of the total Contract Price.
- b. This schedule will be used for determining progress payments and shall be in such detail as may be required by the Contracting Officer.
  - c. Complete all attached forms and Real Property Cost Listing following the end of this section.

END OF SECTION 01011

**ASBESTOS NON-USE FORM**

I certify that all material and equipment installed under Contract Number  
DAHA 34 \_\_\_\_\_ does not contain any regulated asbestos materials and that no  
equipment and material containing asbestos was specified.

Project Architect	_____	Date: _____
Project Engineer	_____	Date: _____
General Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____
Sub-Contractor	_____	Date: _____

Notary \_\_\_\_\_ Date: \_\_\_\_\_

## AIR CONDITIONING AND REFRIGERATION EQUIPMENT SURVEY

BASE/STATE:	MAJCOM: ANG
FACILITY NUMBER:	UNIT:
DESCRIPTION:	STATUS:
CAPACITY:                      TONS	REFRIGERANT TYPE:
REFRIGERANT QTY:            LBS	MODEL:
MANUFACTURER:	DATE MANUFACTURED:
SERIAL NUMBER:	CONDITION ASSESSMENT:
COMMENTS:	

BASE/STATE:	MAJCOM: ANG
FACILITY NUMBER:	UNIT:
DESCRIPTION:	STATUS:
CAPACITY:                      TONS	REFRIGERANT TYPE:
REFRIGERANT QTY:            LBS	MODEL:
MANUFACTURER:	DATE MANUFACTURED:
SERIAL NUMBER:	CONDITION ASSESSMENT:
COMMENTS:	

BASE/STATE:	MAJCOM: ANG
FACILITY NUMBER:	UNIT:
DESCRIPTION:	STATUS:
CAPACITY:                      TONS	REFRIGERANT TYPE:
REFRIGERANT QTY:            LBS	MODEL:
MANUFACTURER:	DATE MANUFACTURED:
SERIAL NUMBER:	CONDITION ASSESSMENT:
COMMENTS:	

**REAL PROPERTY COST LISTING**

PROJECT TITLE \_\_\_\_\_ PROJECT NUMBER XHZG \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

Total Demolition Cost \$ \_\_\_\_\_ Total Construction Cost \$ \_\_\_\_\_ Total Contract Cost \$ \_\_\_\_\_

## 1. GENERAL INFORMATION

## a. Building Dimensions and Area

Main Building \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Wings \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Wings \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Wings \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Offset \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Offset \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

Offset \_\_\_\_\_ ft x \_\_\_\_\_ ft - \_\_\_\_\_ sf

b. Number of Floors: \_\_\_\_\_

## 2. CONSTRUCTION

- a. Type of Foundation: \_\_\_\_\_ (Piers, Grade Beams, Footings, etc...)
- b. Type of Floors: \_\_\_\_\_ (Concrete, Wood, Special Flooring, etc...)
- c. Type of Exterior Walls: \_\_\_\_\_ (Masonry, Wood Siding, etc...)
- d. Type of Roof: \_\_\_\_\_ (BURS, Membrane, Metal, etc...)

## 3. UTILITIES ENTERING FACILITY

- a. Water: \_\_\_\_\_ (Size of Pipe)
- b. Gas: \_\_\_\_\_ (Size of Pipe)
- c. Sanitary Sewer: \_\_\_\_\_ (Size of Pipe)
- d. Storm Sewer: \_\_\_\_\_ (Size of Pipe)
- e. Electric: \_\_\_\_\_ (phase), \_\_\_\_\_ (watts) \_\_\_\_\_ (wire size & type)

**DEMOLITION**

## 1. PAVEMENTS (Driveways, Roads, Streets and Parking)

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 2. STORM SEWER/DRAINAGE SYSTEMS

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 3. SIDEWALKS

Mat'l: \_\_\_\_\_ Sq Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 4. CURB &amp; GUTTER

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_



## 5. EXTERIOR BUILDING WALLS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 6. ROOFS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 7. INTERIOR BUILDING WALLS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 8. AIR CONDITIONING /HEATING EQUIPMENT

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 9. EXTERIOR ELECTRIC SERVICE

Overhead Primary (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_  
\_\_\_\_\_

Undergrd Primary (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_  
\_\_\_\_\_

Overhead Sec. (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Undergrd Sec. (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 10. TRANSFORMERS

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

11. INTERIOR ELECTRIC Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

## 12. MISCELLANEOUS EQUIPMENT (Water coolers, Hand dryers, commodes, urinals, lavatory, exhaust fans, etc...):

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_ Serial No. \_\_\_\_\_

### 13. FENCE

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

### 14. SECURITY ALARMS SYSTEMS

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

### 15. FIRE DETECTION SYSTEMS

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 16. FIRE SUPPRESSION SYSTEMS

Type: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

Type: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 17. STREET LIGHTS

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 18. FIRE HYDRANTS

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 19. HYDRAULIC LIFTS

Tons: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 20. HOIST, CRANES

Tons: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 21. EMERGENCY SHOWER

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

## 22. FIXED SPRAY PAINT BOOTH

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

23. COMPRESSED AIR DISTRIBUTION

Lin Ft.: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

24. THEATRE SEATS

Each: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_ Salvage Value: \_\_\_\_\_

**CONSTRUCTION AND INSTALLATION****1. PAVEMENTS (Driveways, Roads, Streets and Parking)**

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Sq. Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

**2. STORM SEWER/DRAINAGE SYSTEMS**

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

**3. SIDEWALKS**

Mat'l: \_\_\_\_\_ Sq Yds: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

**4. CURB & GUTTER**

Type: \_\_\_\_\_ Lin Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 5. EXTERIOR BUILDING WALLS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 6. ROOFS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 7. INTERIOR BUILDING WALLS

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Mat'l: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 8. AIR CONDITIONING /HEATING EQUIPMENT

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Ton/BTU: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 9. EXTERIOR ELECTRIC SERVICE

Overhead Primary (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Undergrd Primary (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Overhead Sec. (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Undergrd Sec. (Size/Voltage/Phase): \_\_\_\_/\_\_\_\_/\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 10. TRANSFORMERS

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ KVA/Phase: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

## 11. INTERIOR ELECTRIC

Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 12. MISCELLANEOUS EQUIPMENT (Water coolers, Hand dryers, commodes, urinals, lavatory, exhaust fans, etc...):

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_



Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

Type: \_\_\_\_\_ Model No.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_ Serial No. \_\_\_\_\_

### 13. FENCE

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Lin Ft.: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

### 14. SECURITY ALARMS SYSTEMS

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

### 15. FIRE DETECTION SYSTEMS

Type: \_\_\_\_\_ No. Detectors: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equip. Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ No. Detectors: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equip. Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 16. FIRE SUPPRESSION SYSTEMS

Type: \_\_\_\_\_ No. Heads: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equip. Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ No. Heads: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equip. Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

Type: \_\_\_\_\_ No. Heads: \_\_\_\_\_ Sq Ft: \_\_\_\_\_ Labor/Equip. Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 17. STREET LIGHTS

Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 18. FIRE HYDRANTS

No. of Hydrants: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 19. HYDRAULIC LIFTS

Tons: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 20. HOIST, CRANES

Tons: \_\_\_\_\_ Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 21. EMERGENCY SHOWER

Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

## 22. FIXED SPRAY PAINT BOOTH

Labor/Equipment Cost: \_\_\_\_\_ Material Cost: \_\_\_\_\_

23. COMPRESSED AIR DISTRIBUTION

Lin Ft.: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_

Material Cost: \_\_\_\_\_

24. THEATRE SEATS

Each: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_

Material Cost: \_\_\_\_\_

25. LANDSCAPING

Labor/Equipment Cost: \_\_\_\_\_

Material Cost: \_\_\_\_\_

26. LAWN SPRINKLER

Lin Ft.: \_\_\_\_\_

No. Heads: \_\_\_\_\_

Labor/Equipment Cost: \_\_\_\_\_

Material: \_\_\_\_\_

\_\_\_\_\_

**ATTACHMENT X****Contractor Hazardous Material Identification Form**

Date: \_\_\_\_\_

**Part 1**

This part is to be completed by the Contractor prior to start date, and shall be maintained on the job site:

Contractor Company: \_\_\_\_\_

Proposed work term: \_\_\_\_\_ to \_\_\_\_\_

Contractor Point of Contact: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

HM to be used: MFG./Product	MSDS Attached	Quantity Used	Disposal Procedures	Used/Unused Material Removed from ANG Installation

Note: This form is good for a one-month period and is to be submitted to the Hazardous Material Pharmacy (HMP). All HM (hazardous material) used thereafter will be identified to the Contracting Officer's Representative for approval by the HMP. See Part II for the Contract closeout procedures.

HMP phone number is (918) 833-7310

HMP Approval Signatures:

BEE (Bioenvironmental Engineering Representative): \_\_\_\_\_

EM (Environmental Manager): \_\_\_\_\_

Safety Officer: \_\_\_\_\_

**Contractor Hazardous Material Identification Form**  
(Closeout Procedures)

Part 2

Attached this part to Part 1

The Contractor shall accompany the Environmental Manager on the closeout inspection to ensure all used/unused HM was removed from the installation.

Closeout Signatures:

Date: \_\_\_\_\_

EM (Environmental Manager): \_\_\_\_\_

EM (Environmental Manager): \_\_\_\_\_

Contractor: \_\_\_\_\_

## SECTION 01040

## PROJECT COORDINATION

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:
  - 1. Coordination.
  - 2. Administrative and supervisory personnel.
  - 3. General installation provisions.
  - 4. Cleaning and protection.
- B. Additional responsibilities are included in other Division - 1, Specification Sections.
- C. Quality Control is included in Section "Quality Control".
- D. Requirements for the Contractor's Progress Schedule are included in Section "Submittals" and Section "Progress Meetings".

## 1.3 COORDINATION

- A. Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.
  - 1. Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.
  - 2. Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance,

service and repair.

3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings. Prepare similar memoranda for the Government and separate Contractors where coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of schedules.
  2. Installation and removal of temporary facilities.
  3. Delivery and processing of submittals.
  4. Progress meetings.
  5. Project Close-out activities.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work. Refer to other sections for disposition of salvaged materials that are designated as Government's property.

#### 1.4 SUBMITTALS

- A. Coordination Drawings: Prepare and submit coordination Drawings where close and careful coordination is required for installation of products and materials fabricated off-site by separate entities, and where limited space availability necessitates maximum utilization of space for efficient installation of different components.
1. Show the interrelationship of components shown on separate Shop Drawings.
  2. Indicate required installation sequences.

3. Comply with requirements contained in Section "Submittals."
  4. Refer to Division-15 Section "Basic Mechanical Requirements," and Division-16 Section "Basic Electrical Requirements" for specific coordination Drawing requirements for mechanical and electrical installations.
- B. Staff Names: Within 15 days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses and telephone numbers.
- C. Post copies of the list in the Project meeting room, the temporary field office, and at each temporary telephone. Provide copies to/for the Contracting Officer and BCE.

## PART 2 - PRODUCTS (Not Applicable).

## PART 3 - EXECUTION

### 3.1 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Contracting Officer for final decision.
- F. Recheck measurements and dimensions, before starting each installation.



- G. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Contracting Officer for final decision.

### 3.2 CLEANING AND PROTECTION

- A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- B. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
  - 1. Excessive static or dynamic loading.
  - 2. Excessive internal or external pressures.
  - 3. Excessively high or low temperatures.
  - 4. Thermal shock.
  - 5. Excessively high or low humidity.
  - 6. Air contamination or pollution.
  - 7. Water or ice.
  - 8. Solvents.
  - 9. Chemicals.
  - 10. Light.
  - 11. Radiation.
  - 12. Puncture.
  - 13. Abrasion.
  - 14. Heavy traffic.
  - 15. Soiling, staining and corrosion.
  - 16. Bacteria.
  - 17. Rodent and insect infestation.
  - 18. Combustion.

19. Electrical current.
20. High speed operation,
21. Improper lubrication,
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

END OF SECTION 01040

## SECTION 01095

## REFERENCE STANDARDS AND DEFINITIONS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

## 1.2 DEFINITIONS

- A. General: Basic Contract definitions related to terms such as BCE, Contracting Officer, Government, Governing Authority, A/E and Architects are specified in "Supplementary Requirements, 01011.
- B. Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.
- C. Directed: Terms such as directed, requested, authorized, selected, approved, required, and permitted mean directed by the Governing Authority, requested by the Governing Authority, and similar phrases.
- D. Approved: The term approved, when used in conjunction with the Governing Authority's action on the Contractor's submittals, applications, and requests, is limited to the Governing Authority's duties and responsibilities as stated in the Contract Documents.
- E. Requirements and Regulations: This term includes requirements, regulations, laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. Furnish: The term furnish means supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

- H. Provide: The term provide means to furnish and install, complete and ready for the intended use.
- I. Installer: An Installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
  - 1. The term experienced, when used with the term Installer, means having previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of the governing authority.
  - 2. Trades: Using terms such as carpentry is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as carpenter. It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
  - 3. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no choice or option. However, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor. This requirement shall not be interpreted to conflict with codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
- J. Project site is the space available to the Contractor for performing construction activities either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is indicated on the Contract Documents and may or may not be identical with the description of the location on which the Project is to be built.
- K. Testing Agencies: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

### 1.3 SPECIFICATIONS FORMAT AND CONTENT EXPLANATION

- A. Specifications Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16-Division format and

MASTERFORMAT numbering system.

- B. Specifications Content: This Specification uses certain terminology regarding the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
1. Abbreviated Language: Language used in Specifications and other Contract Documents may be abbreviated. Words and meanings shall be interpreted as appropriate. Words that are implied, but not stated, shall be interpolated as the intent requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
  2. Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled directly and/or indirectly by the Contractor. The words "shall be" are implied wherever a colon (:) is used within a sentence or phrase.

#### 1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as        bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.
- C. Conflicting Requirements: Where compliance with two or more standards is required and where the standards may establish different or conflicting requirements for minimum quantities or quality levels. Minimum Quantity or Quality Levels: The quantity or quality level shown or indicated shall be the minimum provided or performed. The actual installation may comply with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. Refer uncertainties and/or ambiguities to the Governing Authority for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents. Where copies of standards are needed to perform a required construction activity, the Contractor

shall obtain copies directly from the publication source.

- E. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authority having jurisdiction, or other entity applicable to the context of the Text provision. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries.
- F. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in the Contract Documents, are defined to mean the associated names. Names and addresses are subject to change and are believed, but not ensured, to be accurate and up to date as of the date of Contract Documents.

AA	Aluminum Association 900 19th St., NW, Suite 300 Washington, DC 20006 (202) 862-5100
AABC	Associated Air Balance Council 1518 K St., NW Washington, DC 20005 (202) 737-0202
AAMA	American Architectural Manufacturers Assoc. 1540 E. Dundee Road, Suite 310 Palatine, IL 60067 (708) 202-1350
AAN	American Association of Nurserymen 1250 Eye St., NW, Suite 500 Washington, DC 20005 (202) 789-2900
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol St., Suite 225 Washington, DC 20001 (202) 624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 Research Triangle Park, NC (919) 549-8141
ACI	American Concrete Institute P.O. Box 19150 Detroit, MI 48219 (313) 532-2600

ACIL	American Council of Independent Laboratories 1629 K St., NW Washington, DC 20006 (202) 887-5872
ACPA	American Concrete Pipe Assoc 8300 Boone Blvd., Suite 400 Vienna, VA 22182 (703) 821-1990
ADC	Air Diffusion Council One Illinois Center, Suite 200 111 East Wacker Drive Chicago, IL 60601-4298 (312) 616-0800
AFBMA	Anti-Friction Bearing Manufacturers Assoc. 1101 Connecticut Ave., NW, Suite 700 Washington, DC 20036 (202) 429-5155
AGA	American Gas Assoc. 1515 Wilson Blvd. Arlington, VA 22209 (703) 841-8400
AHA	American Hardboard Assoc. 520 N. Hicks Road Palatine, IL 60067 (708) 934-8800
AHAM	Association of Home Appliance Manufacturers 20 N. Wacker Drive Chicago, IL 60606 (312) 984-5800
AI	Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, KY 40512-4052 (606) 288-4960
AIA	American Institute of Architects 1735 New York Ave., NW Washington, DC 20006 (202) 626-7300
A.I.A.	American Insurance Assoc. 1130 Connecticut Ave., NW, Suite 1000 Washington, DC 20036 (202) 828-7100
AIHA	American Industrial Hygiene Assoc. P.O. Box 8390 345 White Pond Dr.

Akron, OH 44320 (216) 873-2442

AISC American Institute of Steel Construction  
One East Wacker Drive, Suite 3100  
Chicago, IL 60601-2001 (312) 670-2400

AISI American Iron and Steel Institute  
1101 17th Street, NW, Suite 1300  
Washington, DC 20036-4700 (202) 463-6573

AITC American Institute of Timber Construction  
11818 SE Mill Plain Blvd., Suite 415  
Vancouver, WA 98684 (206) 254-9132

ALCA Associated Landscape Contractors of America  
12200 Sunrise Valley Drive, Suite 150  
Reston, VA 22091 (703) 620-6363

ALI Associated Laboratories, Inc.  
500 S. Vermont St.  
Palatine, IL 60067 (708) 358-7400

ALSC American Lumber Standards Committee  
P.O. Box 210  
Germantown, MD 20875 (301) 972-1700

AMCA Air Movement and Control Assoc.  
30 W. University Drive  
Arlington Heights, IL 60004-1893 (708) 394-0150

ANSI American National Standards Institute  
11 West 42nd Street, 13th Floor  
New York, NY 10036 (212) 642-4900

AOAC Association of Official Analytical Chemists  
2200 Wilson Blvd., Suite 400  
Arlington, VA 22201-3301 (703) 522-3032

AOSA Association of Official Seed Analysts  
c/o Larry J. Prentice  
268 Plant Science 1ANR-UNL, Box 19281  
Lincoln, NE 68583-0911 (402) 472-8649

APA American Plywood Assoc



	P.O. Box 11700 Tacoma, WA 98411 (206) 565-6600
API	American Petroleum Institute 1220 L St., NW Washington, DC 20005 (202) 682-8000
ARI	Air Conditioning and Refrigeration Institute 1501 Wilson Blvd., 6th Floor Arlington, VA 22209 (703) 524-8800
ARMA	Asphalt Roofing Manufacturers Assoc 6288 Montrose Rd. Rockville, MD 20852 (301) 231-9050
ASA	Acoustical Society of America 500 Sunnyside Blvd. Woodbury, NY 11797(516) 349-7800
ASC	Adhesive and Sealant Council 1627 K Street, NW, Suite 1000 Washington, DC 20006-1707 (202) 452-1500
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329 (404) 636-8400
ASME	American Society of Mechanical Engineers 345 East 47th St. New York, NY 10017(212) 705-7722
ASPE	American Society of Plumbing Engineers 3617 Thousand Oaks Blvd., Suite 210 Westlake, CA 91362 (805) 495-7120
ASSE	American Society of Sanitary Engineering P.O. Box 40362 Bay Village, OH 44140 (216) 835-3040
ASTM	American Society for Testing and Materials 1916 Race St. Philadelphia, PA 19103-1187(215) 977-9679
AWCMA	American Window Covering Manufacturers Assoc 355 Lexington Ave.

New York, NY 10017 (212) 661-4261

AWI Architectural Woodwork Institute  
P.O. Box 1550  
13924 Braddock Rd., Suite 100  
Centreville, VA 22020 (703) 222-1100

AWPA American Wood-Preservers' Assoc  
4128-1/2 California Ave. SW, No. 171  
Seattle, WA 98116 (206) 937-5338

AWPB American Wood Preservers Bureau  
4 E. Washington St.  
Newnan, GA 30263 (404) 254-9877

AWS American Welding Society  
550 LeJeune Road, NW  
P.O. Box 351040  
Miami, FL 33135 (305) 443-9353

AWWA American Water Works Assoc  
6666 W. Quincy Ave.  
Denver, CO 80235 (303) 794-7711

BANC Brick Association of North Carolina  
P.O. Box 13290  
Greensboro, NC 27415-3290 (919) 273-5566

BHMA Builders' Hardware Manufacturers Assoc.  
355 Lexington Ave., 17th Floor  
New York, NY 10017 (212) 661-4261

BIA Brick Institute of America  
11490 Commerce Park Drive  
Reston, VA 22091 (703) 620-0010

BIFMA Business and Institutional Furniture  
Manufacturers Assoc.  
2335 Burton St., SE  
Grand Rapids, MI 49506 (616) 243-1681

CAGI Compressed Air and Gas Institute  
c/o John H. Addington  
Thomas Associates, Inc.  
1300 Sumner Ave.  
Cleveland, OH 44115-2851 (216) 241-7333

CAUS	Color Association of the United States 409 W. 44th Street New York, NY 10036 (212) 582-6884
CBM	Certified Ballast Manufacturers Assoc. Hanna Building, No. 772 1422 Euclid Ave. Cleveland, OH 44115-2851 (216) 241-0711
CCC	Carpet Cushion Council P.O. Box 546 Riverside, CT 06878 (203) 637-1312
CDA	Copper Development Assoc. 2 Greenwich Office Park, Box 1840 Greenwich, CT 06836 (203) 625-8210
CFFA	Chemical Fabrics & Film Association, Inc. c/o Thomas Associates, Inc. 1300 Sumner Ave. Cleveland, OH 44115-2851 (216) 241-7333
CGA	Compressed Gas Assoc. 1725 Jefferson Davis Highway, Suite 1004 Arlington, VA 22202-4100 (703) 979-0900
CISCA	Ceiling and Interior Systems Construction Assoc. 5700 Old Orchard Road, 1st Floor Skokie, IL 60077 (708) 965-2776
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, TN 37421 (615) 892-0137
CRI	Carpet and Rug Institute P.O. Box 2048 Dalton, GA 30722 (404) 278-3176
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Rd. Schaumburg, IL 60173 (708) 517-1200
CTI	Ceramic Tile Institute of America 700 N. Virgil Ave. Los Angeles, CA 90029 (213) 660-1911

DHI	Door and Hardware Institute 14170 New Brook Drive Chantilly, VA 22022 (703) 222-2010
DLPA	Decorative Laminate Products Assoc. 600 S. Federal St., Suite 400 Chicago, IL 60605 (312) 922-6222
ECSA	Exchange Carriers Standards Assoc. 5430 Grosvenor Lane, Suite 200 Bethesda, MD 20814 (301) 564-4505
EIA	Electronic Industries Assoc. 2001 Pennsylvania Ave., NW Washington, DC 20006-1813 (202) 457-4900
EIMA	Exterior Insulation Manufacturers Assoc. 2759 State Road 580, Suite 112 Clearwater, FL 34621 (813) 726-6477
EJMA	Expansion Joint Manufacturers Assoc. 25 N. Broadway Tarrytown, NY 10591 (914) 332-0040
ETL	ETL Testing Laboratories, Inc. P.O. Box 2040 Route 11, Industrial Park Cortland, NY 13045 (607) 753-6711
FCI	Fluid Controls Institute P.O. Box 9036 Morristown, NJ 07960 (201) 829-0990
FGMA	Flat Glass Marketing Assoc. White Lakes Professional Bldg. 3310 S.W. Harrison Topeka, KS 66611-2279 (913) 266-7013
FM	Factory Mutual Research Organization 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062 (617) 762-4300
FTI	Facing Tile Institute P.O. Box 8880

Canton, OH 44711 (216) 488-1211

GA Gypsum Association  
810 First Street, NE, Suite 510  
Washington, DC 20002 (202) 289-5440

HEI Heat Exchange Institute  
c/o John H. Addington  
Thomas Associates, Inc.  
1300 Sumner Ave.  
Cleveland, OH 44115-2851 (216) 241-7333

HI Hydronics Institute  
P.O. Box 218  
35 Russo Place  
Berkeley Heights, NJ 07922 (908) 464-8200

H.I. Hydraulic Institute  
30200 Detroit Road  
Cleveland, OH 44145-1967 (216) 899-0010

HMA Hardwood Manufacturers Assoc.  
400 Penn Center Blvd.  
Pittsburgh, PA 15235 (412) 829-0770

HPMA Hardwood Plywood Manufacturers Assoc.  
1825 Michael Farraday Drive  
P.O. Box 2789  
Reston, VA 22090-2789 (703) 435-2900

IBD Institute of Business Designers  
341 Merchandise Mart  
Chicago, IL 60654 (312) 647-1950

ICEA Insulated Cable Engineers Association, Inc.  
P.O. Box 440  
South Yarmouth, MA 02664 (508) 394-4424

IEC International Electrotechnical Commission  
(Available from ANSI)  
1430 Broadway  
New York, NY 10018 (212) 354-3300

IEEE Institute of Electrical and Electronic Engineers  
345 E. 47th St.

New York, NY 10017 (212) 705-7900

IESNA            Illuminating Engineering Society of North America  
345 E. 47th St.  
New York, NY 10017 (212) 705-7926

IGCC            Insulating Glass Certification Council  
c/o ETL Testing Laboratories, Inc.  
P.O. Box 2040  
Route 11, Industrial Park  
Cortland, NY 13045 (607) 753-6711

ILI              Indiana Limestone Institute of America  
Stone City Bank Building, Suite 400  
Bedford, IN 47421 (812) 275-4426

IMSA            International Municipal Signal Assoc.  
165 E. Union St.  
P.O. Box 539  
Newark, NY 14513 (315) 331-2182

IRI              Industrial Risk Insurers  
85 Woodland St.  
Hartford, CT 06102 (203) 520-7300

ISA              Instrument Society of America  
P.O. Box 12277  
67 Alexander Drive  
Research Triangle Park, NC 27709 (919) 549-8411

KCMA            Kitchen Cabinet Manufacturers Assoc.  
1899 Preston White Drive  
Reston, VA 22091-4326 (703) 264-1690

LIA              Lead Industries Association, Inc.  
295 Madison Avenue  
New York, NY 10017 (212) 578-4750

LPI              Lightning Protection Institute  
3365 North Arlington Heights Rd., Suite J  
Arlington Heights, IL 60004 (708) 255-3003

MBMA            Metal Building Manufacturer's Assoc.  
c/o Charles M. Stockinger  
Thomas Associates, Inc.  
1300 Sumner Ave.

Cleveland, OH 44115-2851 (216) 241-7333

MCAA Mechanical Contractors Association of America  
1385 Piccard Dr.  
Rockville, MD 20850-4329 (301) 869-5800

MFMA Maple Flooring Manufacturers' Assoc.  
60 Revere Dr., Suite 500  
Northbrook, IL 60062 (708) 480-9138

MIA Marble Institute of America  
33505 State St.  
Farmington, MI 48335 (313) 476-5558

ML/SFA Metal Lath/Steel Framing Assoc.  
(A Division of the National Association  
of Architectural Metal Manufacturers)  
600 S. Federal St., Suite 400  
Chicago, IL 60605 (312) 922-6222

MSS Manufacturers Standardization Society of  
the Valve and Fittings Industry  
Vienna, VA 22180 (703) 281-6613

NAAMM National Association of Architectural  
Metal Manufacturers  
600 S. Federal St., Suite 400  
Chicago, IL 60605 (312) 922-6222

NAIMA North American Insulation Manufacturers Assoc.  
44 Canal Center Plaza, Suite 310  
Alexandria, VA 22314 (703) 684-0084

NAPA National Asphalt Pavement Assoc.  
NAPA Building  
5100 Forbes Blvd.  
Lanham, MD 20706-4413 (301) 731-4748

NAPF National Association of Plastic Fabricators  
(Now DLPA)

NBGQA National Building Granite Quarries Assoc.  
P.O. Box 482  
Barre, VT 05641 (802) 476-3115

NBHA	National Builders Hardware Assoc. (Now DHI)
NCMA	National Concrete Masonry Assoc. P.O. Box 781 Herndon, VA 22070-0781 (703) 435-4900
NCRPM	National Council on Radiation Protection and Measurements 7910 Woodmont Ave., Suite 800 Bethesda, MD 20814 (301) 657-2652
NCSPA	National Corrugated Steel Pipe Association 2011 Eye Street, NW Washington, DC 20006 (202) 223-2217
NEC	National Electrical Code (from NFPA)
NECA	National Electrical Contractors Assoc. 7315 Wisconsin Ave. Bethesda, MD 20814 (301) 657-3110
NEII	National Elevator Industry, Inc. 185 Bridge Plaza, North Fort Lee, NJ 07024 (201) 944-3211
NEMA	National Electrical Manufacturers Assoc. 2101 L St., NW, Suite 300 Washington, DC 20037 (202) 457-8400
NETA	International Electrical Testing Assoc. P.O. Box 687 Morrison, CO 80465 (303) 467-0526
NFPA	National Fire Protection Assoc. One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101 (617) 770-3000 (800) 344-3555
N.F.P.A.	National Forest Products Assoc. 1250 Connecticut Ave., NW, Suite 200 Washington, DC 20036 (202) 463-2700
NHLA	National Hardwood Lumber Assoc.



	P.O. Box 34518 Memphis, TN 38184-0518 (901) 377-1818
NKCA	National Kitchen Cabinet Assoc. (Now KCMA)
NLGA	National Lumber Grades Authority 1055 W. Hastings St., Suite 260 Vancouver, British Columbia Canada V6E 2E9 (604) 687-2171
NOFMA	National Oak Flooring Manufacturers Assoc. P.O. Box 3009 Memphis, TN 38173-0009 (901) 526-5016
NPA	National Particleboard Assoc. 18928 Premiere Court Gaithersburg, MD 20879 (301) 670-0604
NPCA	National Paint and Coatings Assoc. 1500 Rhode Island Ave., NW Washington, DC 20005 (202) 462-6272
NRCA	National Roofing Contractors Assoc. 10255 W. Higgins Rd., Suite 600 Rosemont, IL 60018-5607 (708) 299-9070
NSF	National Sanitation Foundation 3475 Plymouth Rd. P.O. Box 1468 Ann Arbor, MI 48106 (313) 769-8010
NSSEA	National School Supply and Equipment Assoc. 8300 Colesville Rd., No. 250 Silver Spring, MD 20910 (301) 495-0240
NTMA	National Terrazzo and Mosaic Assoc. 3166 Des Plaines Ave., Suite 132 Des Plaines, IL 60018 (708) 635-7744
NWMA	National Woodwork Manufacturers Assoc. (Now NWWDA)
NWWDA	National Wood Window and Door Assoc. 1400 E. Touhy Ave., #G54 Des Plaines, IL 60018 (708) 299-5200

(800) 223-2301

PCA	Portland Cement Assoc. 5420 Old Orchard Road Skokie, IL 60077 (708) 966-6200
PCI	Precast/Prestressed Concrete Institute 175 W. Jackson Blvd. Chicago, IL 60604 (312) 786-0300
PDI	Plumbing and Drainage Institute c/o Sol Baker 1106 W. 77th St., South Dr. Indianapolis, IN 46260 (317) 251-6970
PEI	Porcelain Enamel Institute 1101 Connecticut Ave., NW, Suite 700 Washington, DC 20036 (202) 857-1134
RFCI	Resilient Floor Covering Institute 966 Hungerford Drive, Suite 12-B Rockville, MD 20805 (301) 340-8580
RIS	Redwood Inspection Service 405 Enfrente Drive, Suite 200 Novato, CA 94949 (415) 382-0662
RMA	Rubber Manufacturers Assoc. 1400 K St., NW Washington DC 20005 (202) 682-4800
SDI	Steel Deck Institute P.O. Box 9506 Canton, OH 44711 (216) 493-7886
S.D.I.	Steel Door Institute 30200 Detroit Road Cleveland, OH 44145 (216) 889-0010
SGCC	Safety Glazing Certification Council c/o ETL Testing Laboratories Route 11, Industrial Park Cortland, NY 13045 (607) 753-6711
SHLMA	Southern Hardwood Lumber Manufacturers Assoc. (Now HMA)

SIGMA	Sealed Insulating Glass Manufacturers Assoc. 401 N. Michigan Chicago, IL 60611 (312) 644-6610
SJI	Steel Joist Institute 1205 48th Avenue North, Suite A Myrtle Beach, SC 29577 (803) 449-0487
SMA	Screen Manufacturers Assoc. 3950 Lake Shore Dr., Suite 502-A Chicago, IL 60613-3431 (312) 525-2644
SMACNA	Sheet Metal and Air Conditioning Contractors National Association 4201 Lafayette Center Dr. Chantilly, VA 22021 (703) 803-2980
SPIB	Southern Pine Inspection Bureau 4709 Scenic Highway Pensacola, FL 32504 (904) 434-2611
SPRI	Single Ply Roofing Institute 20 Walnut St. Wellesley Hills, MA 02189 (617) 237-7879
SSPC	Steel Structures Painting Council 4400 Fifth Ave. Pittsburgh, PA 15213-2683 (412) 268-3327
SSPMA	Sump and Sewage Pump Manufacturers Assoc. P.O. Box 298 Winnetka, IL 60093 (708) 835-8911
SWI	Steel Window Institute c/o Thomas Associates, Inc. 1300 Sumner Ave, Cleveland, OH 44115-2851 (216) 241-7333
SWPA	Submersible Wastewater Pump Assoc. 600 S. Federal Street, Suite 400 Chicago, IL 60605 (312) 922-6222
TCA	Tile Council of America P.O. Box 326 Princeton, NJ 08542 (609) 921-7050

TIMA	Thermal Insulation Manufacturers Assoc. 29 Bank Street Stamford, CT 06901 (203) 324-7533 (Standards now issued by NAIMA)
TPI	Truss Plate Institute 583 D'Onofrio Drive, Suite 200 Madison, WI 53719 (608) 833-5900
UFAC	Upholstered Furniture Action Council Box 2436 High Point, NC 27261 (919) 885-5065
UL	Underwriters Laboratories, Inc. 333 Pfingsten Rd. Northbrook, IL 60062 (708) 272-8800
USP	U.S. Pharmacopoeial Convention 12601 Twinbrook Parkway Rockville, MD 20852 (301) 881-0666
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97223 (503) 639-0651
WCMA	Wallcovering Manufacturers Assoc. 355 Lexington Ave., 17th Floor New York, NY 10017 (212) 661-4261 (WCMA has moved from this location, perhaps to the Chicago area. Address and telephone number not confirmed.)
WIC	Woodwork Institute of California P.O. Box 11428 Fresno, CA 93773-1428 (209) 233-9035
WRI	Wire Reinforcement Institute 1101 Connecticut Ave. NW, Suite 700 Washington, DC 20036-4303 (202) 429-5125
WSC	Water Systems Council 600 S. Federal St., Suite 400 Chicago, IL 60605 (312) 922-6222
WSFI	Wood and Synthetic Flooring Institute

4415 W. Harrison St., Suite 242-C  
Hillside, IL 60162 (708) 449-2933

WLPDIA Western Lath, Plaster, Drywall Industries Assoc.  
(Formerly California Lath & Plaster Assoc.)  
8635 Navajo Road  
San Diego, CA 92119 (619) 466-9070

WWPA Western Wood Products Assoc.  
Yeon Building  
522 SW 5th Avenue  
Portland, OR 97204-2122 (503) 224-3930

W.W.P.A. Woven Wire Products Assoc.  
2515 N. Nordica Ave.  
Chicago, IL 60635 (312) 637-1359

- G. Federal Government Agencies: Names and titles of federal government standard- or Specification-producing agencies may be often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standard or Specification-producing agencies of the federal government. Names and addresses are subject to change but are believed to be, but are not assured to be, accurate and up to date as of the date of the Contract Documents. Any and/or all agencies not referenced are for informational purposes.

CFR Code of Federal Regulations  
(Available from the Government Printing Office)  
N. Capitol St. between G and H St. NW  
Washington, DC 20402 (202) 783-3238  
(Material is usually first published in the "Federal Register")

CPSC Consumer Product Safety Commission  
5401 Westbard Ave.  
Bethesda, MD 20207 (301) 492-6580  
(800) 638-2772

CS Commercial Standard  
(U.S. Department of Commerce)  
Washington, DC 20230 (202) 482-2000

DOC U.S. Department of Commerce  
14th St. and Constitution Ave., NW  
Washington, DC 20230 (202) 482-2000

DOT Department of Transportation

	400 Seventh St., SW Washington, DC 20590	(202) 366-4000
EPA	Environmental Protection Agency 401 M St., SW Washington, DC 20460	(202) 382-2090
FAA	Federal Aviation Administration (U.S. Department of Transportation) 800 Independence Ave., SW Washington, DC 20590	(202) 366-4000
FCC	Federal Communications Commission 1919 M St., NW Washington, DC 20554	(202) 632-7000
FHA	Federal Housing Administration (U.S. Department of Housing and Urban Development) Director, Manufactured Housing and Construction Standards Division 451 Seventh St., SW, Room 9158 Washington, DC 20201	(202) 755-5210
FS	Federal Specification (from GSA) Specifications Unit (WFSIS) 7th and D St., SW Washington, DC 20407	(202) 708-9205
GSA	General Services Administration F St. and 18th St., NW Washington, DC 20405	(202) 708-5082
MIL	Military Standardization Documents (U.S. Department of Defense) Naval Publications and Forms Center 5801 Tabor Ave. Philadelphia, PA 19120	
NIST	National Institute of Standards and Technology (U.S. Department of Commerce) Gaithersburg, MD 20899	(301) 975-2000
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) N3647 200 Constitution Ave., NW	

	Washington, DC 20210	(202) 219-8148
PS	Product Standard of NBS (U.S. Department of Commerce) Washington, DC 20230	(202) 482-2000
REA	Rural Electrification Administration (U.S. Department of Agriculture) 14th St. and Independence Ave., SW Washington, DC 20250	(202) 447-2791
USDA	U.S. Department of Agriculture 14th St. and Independence Ave., SW Washington, DC 20250	(202) 447-2791
USPS	U.S. Postal Service 475 L'Enfant Plaza, SW Washington, DC 20260-0010	(202) 268-2000

## 1.5 PERMITS, LICENSED AND CERTIFICATES

Permits, Licenses, and Certificates: For the Government's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01095

## SECTION 01200

## PROJECT MEETINGS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for project meetings including but not limited to:

1. Pre-Performance Conference (Government's Responsibility).
2. Progress Meetings.

B. Construction schedules are specified in another Division-1 Section.

## 1.3 PRE-PERFORMANCE CONFERENCE

A. A pre-performance conference and organizational meeting will be held at the Project site or other convenient location prior to issuance of notice to proceed. The meeting will be conducted by the Government to review responsibilities and personnel assignments.

B. Attendees: The Base Civil Engineer, A/E, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.

C. Agenda: Discuss items of significance that could affect progress including such topics as:

1. Contractor's Handbook/Guide
2. Tentative construction schedule.
3. Critical Work sequencing.
4. Designation of responsible personnel.
5. Procedures for processing field decisions and Change Orders.



6. Procedures for processing Applications for Payment.
7. Submittal of Shop Drawings, Product Data and Samples.
8. Preparation of record documents.
9. Use of the premises.
10. Office, Work and storage areas.
11. Equipment deliveries and priorities.
12. Safety procedures.
13. First aid.
14. Security.
15. Housekeeping.
16. Working hours.

#### 1.4 PROGRESS MEETINGS

- A. Contractor shall schedule and conduct progress meetings at regularly scheduled intervals, not less than once each week. Notify all persons to attend of scheduled meeting dates. Coordinate dates of meetings so that they coincide with a progress report as the "as of date" for progress payment. The meetings shall be scheduled and conducted a minimum of one every week. The Contractor's field office/job trailer is recommended for use for these meetings. Each attendee shall have access to a set of Contract Documents (plans and specifications). Contractor's copy of the most current submittals shall also be available for review.
- B. Attendees: The BCE representative, A/E, project superintendent and all subcontractors with work still scheduled shall attend. The using organization and vendors may be invited.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the Project.
  1. Contract's Progress Schedule and Contract Progress Report: Review progress since the last meeting. Determine where each activity is in relation to the Contract's Progress Schedule and Report, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
  2. Review the present and future needs of each entity present, including such items as:
    - a. Interface requirements.
    - b. Time.
    - c. Sequences.

- d. Deliveries.
- e. Off-site fabrication problems.
- f. Access.
- g. Site utilization.
- h. Temporary facilities and services.
- i. Hours of Work.
- j. Hazards and risks.
- k. Housekeeping.
- l. Quality and Work standards.
- m. Change Orders.
- n. Documentation of information for progress payment requests.

- D. Reporting: No later than 3 days after each progress meeting date, distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01200

## SECTION 01300

## SUBMITTALS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including;
  - 1. Contract Progress schedule.
  - 2. Submittal schedule.
  - 3. Progress reports.
  - 4. Shop Drawings.
  - 5. Product Data.
  - 6. Samples.
- B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:
  - 1. Permits.
  - 2. Applications for payment.
  - 3. Performance and payment bonds.
  - 4. Insurance certificates.
  - 5. List of Subcontractors.
- C. The term "Work" includes construction required by the Contract Documents, including labor necessary to produce the construction and materials, products, equipment and systems incorporated or to be incorporated in such construction.
- D. Inspection and test reports are included in Section "Quality Control Services."

### 1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
  2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
  3. The Contracting Officer and the Base Civil Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received, or the Submittal will be returned without review.
  4. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
    - a. Allow three weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Contracting Officer will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
    - b. If an intermediate submittal is necessary, process the same as the initial submittal.
    - c. Allow three weeks for reprocessing each submittal.
    - d. Seventy Five percent (75%) of the submittals identified on the critical path shall be submitted to the Base Civil Engineer within the thirty (30) days of the Notice of Award. At the receipt of 75% submittals of the critical path the Notice to Proceed with construction will be issued. Failure to complete the above requirement will result in delay of the Notice to Proceed. No extension of Contract Time will be authorized because of failure to transmit submittals to the Contracting Officer sufficiently in advance of the Work to permit processing.
- B. Submittal Preparation: Submittals will be submitted utilizing AF Form 3000 to be provided in the "Contractor's Handbook/Guide".

- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Contracting Officer using a transmittal form as specified in Section "Supplementary Conditions. Submittals received from sources other than the Contractor will be returned without action.
  - 1. On the transmittal Record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
  - 2. Transmittal Form: Use the sample form included in the Contractor's Handbook/Guide for transmittal of submittals, AF Form 3000.
- D. Minor Deviations: Minor deviations from contract requirements require government approval and will be considered where advantageous to the Government. When proposing a deviation, submit a written request to the Contracting Officer, with documentation of the nature and features of the deviation and why the deviation is desirable and beneficial to the Government. If lower cost is a benefit, also include an estimate of cost savings. Identify the proposed deviation separately and include the documentation for the proposed deviation along with the required submittal item. When submitting a deviation for approval, the Contractor warrants the following:
  - 1. Deviation is Compatible: The Contract has been reviewed to establish that the deviation, if incorporated, will be compatible with other elements of the work.
  - 2. Contractor is Responsible: The Contractor shall take actions and bear the additional costs, including review costs by the Government, necessary due to the proposed deviation.
- E. Resubmittal Costs: Initial submittals requiring Government approval, will be reviewed at no cost to the Contractor. The cost of reviewing resubmittals, for reason of failure of the initial submittal to meet contract requirements, shall be the responsibility of the Contractor. The contract completion date will not be extended due to non-compliance with submittal requirements.

#### 1.4 CONTRACT PROGRESS SCHEDULE

- A. Contract Progress Schedule: Prepare a fully developed progress schedule. Submit within 10 days of the date established for "Notice to Proceed". The Schedule shall be prepared and completed on AF Form 3064, as furnished in the Contractor's Handbook/Guide. (This requirement is in addition to the CPM.) AF Form and CPM are required only for projects in excess of fifty nine (59) days.

1. Use the same breakdown of units of the Work as indicated in the "Schedule of Values".
  2. The schedule shall utilize all days available with 30-45 days at the end of the Work for correction of punchlist items and final inspection.
  3. The Contractor shall complete the Project as early as possible.
  4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the Work.
  5. Coordinate the Contract Progress Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
  6. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Contracting Officer's procedures necessary for certification of Substantial Completion.
- B. Phasing: Provide notations on the schedule to show how the sequence of the Work is affected by requirements for phased completion to permit Work by separate Contractors and partial occupancy, if required, by the Government prior to Substantial Completion.
- C. Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.
- D. Schedule Updating: Update the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

## 1.5 SUBMITTAL SCHEDULE

- A. After development and acceptance of the Contract Progress Schedule, prepare a complete schedule of submittals. Submit the schedule within 10 days of the date required for establishment of the Contract Progress Schedule. A Submittal Schedule form will be included in the Contractor's Handbook/Guide.
1. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contract Progress Schedule.

2. Prepare the schedule in chronological order and provide the information indicated on the form.
- B. Distribution:
1. In addition to distribution specified in Section "Supplementary Requirements", print and distribute copies to subcontractors and other parties required to comply with submittal dates indicated. Post copies in the Project field office.
  2. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- C. Schedule Updating: Update the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

## 1.6 PROGRESS REPORTS

### Contractor's Progress Reports:

- A. AF Form 3065, will be submitted semimonthly. They will reflect work elements and percentages as shown on the approved Progress Schedule. They will be provided by the contractor for submittal thru the Base Civil Engineer to the Contracting Officer. These semimonthly Progress Reports are due on the 1st and 15th of each month.
- B. The Base Civil Engineer will verify amounts completed, make any necessary changes/revisions and submit to the Contracting Officer along with the Government's Progress Report.
- C. Progress Payments will be based upon percentage of work completed and materials stored on base. The Base Civil Engineer will verify all Progress Reports.
- D. AF Form 3065 to be provided in the "Contractor's Handbook/Guide".

## 1.7 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings.

Standard information prepared without specific reference to the Project is not considered Shop Drawings.

- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
1. Dimensions.
  2. Identification of products and materials included.
  3. Compliance with specified standards.
  4. Notation of coordination requirements.
  5. Notation of dimensions established by field measurement.
  6. Sheet Size: Except for templates, patterns and similar full- size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 24" x 36".
  7. Initial Submittal: Submit one correctable translucent reproducible print and one blue or black-line print for the Government's review; the reproducible print will be returned.
  8. Final Submittal: Submit 3 blue- or black-line prints and 2 additional prints where required for maintenance manuals, plus the number of prints needed by the Government for distribution. 2 prints will be retained; the remainder returned. One of the prints returned shall be marked-up and maintained as a "Record Document".
  9. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.
- C. Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.
1. Preparation of coordination Drawings is specified in section "Project Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.
  2. Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.



## 1.8 PRODUCT DATA

Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

- A. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
  - 1. Manufacturer's printed recommendations.
  - 2. Compliance with recognized trade association standards.
  - 3. Compliance with recognized testing agency standards.
  - 4. Application of testing agency labels and seals.
  - 5. Notation of dimensions verified by field measurement.
  - 6. Notation of coordination requirements.
- B. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- C. Distribution: Furnish copies of approved submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
  - 1. Do not proceed with installation until an applicable copy of Product Data is in the installer's possession.
  - 2. Do not permit use of unmarked copies of Product Data in connection with construction.

## 1.9 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.
  - 1. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Include the following:

- a. Generic description of the Sample.
    - b. Sample source.
    - c. Product name or name of manufacturer.
    - d. Compliance with recognized standards.
    - e. Availability and delivery time.
  2. Submit Samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
    - a. Where variation in color, pattern, texture or other characteristics is inherent in the material or product represented, submit multiple units (not less than 3) that show approximate limits of the variations.
    - b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation and similar construction characteristics.
    - c. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
  3. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit 3 sets; one will be returned marked with the action taken.
  4. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
  5. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- B. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
1. Field Samples specified in individual Sections are special types of Samples. Field Samples are full-size examples erected on site to illustrate finishes, coatings, or finish materials and to establish the standard by which the Work will be judged.
  2. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 01300

## SECTION 01400

### QUALITY CONTROL

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for quality control.
- B. Quality control includes inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Government.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
  - 1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
  - 2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
  - 3. Requirements for the Contractor to provide quality control required by the authorities having jurisdiction are not limited by provisions of this Section.

##### 1.3 RESPONSIBILITIES

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests and

similar quality control services specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Government's responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. Costs for these services shall be included in the Contract Sum.

1. The Contractor shall employ and pay independent agencies, to perform specified quality control services.
  2. Retesting: The cost for retesting is the Contractor's responsibility where results of required inspections, tests, or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility. Cost of retesting revised or replaced construction is the Contractor's responsibility where the Contractor performed required tests on original construction.
  3. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:
    - a. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
    - b. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
    - c. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
    - d. Security and protection of samples and test equipment at the Project site.
- B. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Government and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.
1. The agency shall notify the Government and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. The agency is not authorized to release, revoke, alter or enlarge

requirements of the Contract Documents, or approve or accept any portion of the Work.

3. The agency shall not perform any duties of the Contractor.

C. Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

#### 1.4 SUBMITTALS

- A. The independent testing agency shall submit a certified written report of each inspection, test or similar service, to the Government, in duplicate, unless the Contractor is responsible for the service. If the Contractor is responsible for the service, submit a certified written report of each inspection, test or similar service through the Contractor, in duplicate.
- B. Submit additional copies of each written report directly to the governing authority.
- C. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:
1. Date of issue.
  2. Project title and number.
  3. Name, address and telephone number of testing agency.
  4. Dates and locations of samples and tests or inspections.
  5. Names of individuals making the inspection or test.
  6. Designation of the Work and test method.
  7. Identification of product and Specification Section.
  8. Complete inspection or test data.
  9. Test results and an interpretations of test results.
  10. Ambient conditions at the time of sample-taking and testing.

11. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting.

## 1.5 QUALITY ASSURANCE

- A. Qualification for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and tests to be performed.
- B. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State in which the Project is located.

## PART 2 - PRODUCTS (Not Applicable).

## PART 3 - EXECUTION

### 3.1 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching."
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction.
- C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION 01400

## SECTION 01500

### CONSTRUCTION & DEMOLITION WASTE MANAGEMENT

#### PART 1 – GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Section 01010 – General Requirements
- B. Section 01011 – Supplementary Requirements
- C. Section 01040 – Project Coordination
- D. Section 01095 – Reference Standards and Definitions
- E. Section 01200 – Project Meetings
- F. Section 01300 – Submittals
- G. Section 01400 – Quality Control
- H. Section 01600 – Materials and Equipment
- I. Section 01631 – Product Substitutions

##### 1.2 - WASTE MANAGEMENT GOALS

- A. The government has established that this Project shall generate the least amount of waste possible and that processes that ensure generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors shall be employed.
- B. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.
- C. With regard to these goals the Contractor shall develop, for the government's review, a Construction & Demolition Waste Management Plan in accordance with Deputy Under Secretary Defense (DUSD) guidance.

##### 1.3 – CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN



- A. Draft Construction & Demolition Waste Management Plan: Within 10 Calendar days after receipt of Award of Contract or prior to any waste removal, whichever occurs sooner, the Contractor shall submit to the government a Draft Construction & Demolition Waste Management Plan. The plan shall include the following:
1. Analysis of the proposed jobsite waste to be generated, including types and quantities.
  2. Landfill options: The name of the landfill(s) where trash will be disposed of, the applicable landfill tipping fee(s) and the projected cost of disposing of all Project waste in the landfill(s).
  3. Alternatives to Landfilling: A list of each material proposed to be salvaged, reused, or recycled during the course of the Project, the proposed local market for each material, and the estimated net cost savings or additional costs resulting from separating and recycling (versus landfilling) each material. "Net" means that the following have been subtracted from the cost of separating and recycling: (a) revenue from the sale of recycled or salvaged materials and (b) landfill tipping fees saved due to diversion of materials from the landfill. The list of these materials is to include, at minimum, the following materials:
    - a. Cardboard
    - b. Clean dimensional wood.
    - c. Beverage containers.
    - d. Land clearing debris
    - e. Concrete
    - f. Bricks
    - g. Concrete Masonry Units (CMU)
    - h. Asphalt
    - i. Metals from banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
- B. Resources for Development of Construction & Demolition Waste Management Plan:
1. Recycling Haulers and Markets: Provide a list of local or regional Recycling Haulers and Markets:
  2. Recycling Economics Information: Provide estimates showing costs or savings for recycling options.
- C. Final Construction & Demolition Waste Management Plan: Once the government has determined which of the recycling options addressed in the draft Construction

& Demolition Waste Management Plan are acceptable, the Contractor shall submit, with 10 days a Final Construction & Demolition Waste Management Plan. The Final Construction & Demolition Waste Management Plan shall contain the following:

1. Analysis of the proposed jobsite waste to be generated, including types and quantities.
2. Landfill options: The name of the landfill(s) where trash will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all Project waste in landfill(s).
3. Alternatives to Landfilling: A list of the waste materials from the Project that will be separated for reuse, salvage, or recycling.
4. Meetings: A description of the regular meetings to be held to address waste management. Refer to section 01200 - Project Meeting.
5. Materials Handling Procedures: A description of the means by which any waste materials identified in the item (3) will be protected from contamination, and a description of the means to be employed in recycling the above materials consistent with requirements for acceptance by designated facilities.
6. Transportation: A description of the means of the transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site) and destination of materials.

#### 1.4 CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: The Contractor shall designate an on-site party (or parties) responsible for instructing workers and overseeing and documenting results of the Construction & Demolition Waste Management Plan for the Project.
- B. Distribution: The Contractor shall distribute copies of the Construction & Demolition Waste Management Plan to the Job Site Foreman, each Subcontractor, and the government.
- C. Instruction: The Contractor shall provide on-site instruction of appropriate separation, handling, recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

- D. Separation facilities: The Contractor shall layout and label specific areas to facilitate separation of materials for potential recycling, salvage, reuse, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid contamination of materials.
- E. Hazardous wastes: Hazardous wastes shall be separated, stored, and disposed of according to local, state, and federal regulations.
- F. Applications for Progress Payments: The Contractor shall submit with each Application for Progress Payment a Summary of Waste Generated by the Project. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The summary shall be submitted on a form acceptable to the government and shall contain the following information:
  - 1. The amount (in tons or cubic yards) of materials landfilled from the Project, the identity of the landfill, the total amount of tipping fees paid at the landfill, and the total disposal cost. Include manifests, weight tickets, receipt, and invoices.
  - 2. For each material recycled, reused, or salvaged from the Project, the amount (in tons or cubic yds), the date removed from the jobsite, the receiving party, the transportation cost, the amount of any money paid or received for the recycled or salvaged material, and the recycling each material. Attach manifests, weight tickets, receipts, and invoices.

## 1.5 – SPECIAL PROGRAMS

- A. The Contractor shall be responsible for final implementation of programs involving tax credits or rebates or similar incentives related to recycling, if applicable to the Project. Revenues or other savings obtained for recycling or returns shall accrue to the Contractor.
- B. The Contractor is responsible for obtaining information packets relevant to all the programs prior to starting work on the Project. A copy of the Construction & Demolition Waste Management Guide will be made available from the Installation Environmental Management Office.
- C. The Contractor shall document work methods and recycled materials that qualify for tax credits, rebates, and other savings under each program.

## PART 2 - PRODUCTS

Not Used.

### PART 3 - EXECUTION

Not Used.

END OF SECTION

## SECTION 01600

## MATERIALS AND EQUIPMENT

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
- B. Standards: Refer to Section "Definitions and Standards" for applicability of industry standards to products specified.
- C. Administrative procedures for handling requests for substitutions made after award of the Contract are included under Section "Product Substitutions."

## 1.3 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well recognized meanings in the construction industry.
- B. "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
- C. "Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature, that is current as of the date of the Contract Documents.
- D. "Materials" are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
- E. "Equipment" is a product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping.

#### 1.4 SUBMITTALS

Submittals shall be in accordance with Section "Submittals".

#### 1.5 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind, from a single source.
- B. Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.
- B. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
- C. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
- D. Deliver products to the site in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
- E. Inspect products upon delivery to ensure compliance with the Contract Documents, and to ensure that products are undamaged and properly protected.
- F. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
- G. Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.
- H. Store products subject to damage by the elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation.

Maintain temperature and humidity within range required by manufacturer's instructions.

## PART 2 - PRODUCTS

### 2.1 PRODUCT SELECTION

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation. Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
- B. Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:
  - 1. Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
  - 2. Non-Proprietary Specifications: When the Specifications list products or manufacturers that are available and may be incorporated in the Work, but does not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
  - 3. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application. Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.
  - 4. Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.
  - 5. Visual Matching: Where Specifications require matching an established Sample, the Contracting Officer's decision will be final on whether a

proposed product matches satisfactorily.

6. Visual Selection: Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Contracting Officer will select the color, pattern and texture from the product line selected.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01600



## SECTION 01631

## PRODUCT SUBSTITUTIONS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. The Schedule and the Schedule of Submittals are included under Section "Submittals."
- C. Procedural requirements governing the Contractor's selection of products and product options are included under Section "Materials and Equipment."

## 1.3 DEFINITIONS

- A. Definitions used in this Article are not intended to change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions." The following are not considered substitutions:
  - 1. Revisions to Contract Documents requested by the Governing Authority.
  - 2. Specified options of products and construction methods included in Contract Documents.
  - 3. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.
- C. Minor Deviations: Requests for minor deviations shall be as specified in Section "Submittals".

#### 1.4 SUBMITTALS

- A. Substitution Request Submittal: Requests for substitution will be considered if received within 60 days after commencement of the Work. Requests received more than 60 days after commencement of the Work may be considered or rejected at the discretion of the Governing Authority.
- B. Submit four (4) copies of each request for substitution for consideration. Submit requests in the form and in accordance with procedures required for Change Order proposals.
- C. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
  - 1. Product Data, including Drawings and descriptions of products, fabrication and installation procedures.
  - 2. Samples, where applicable or requested.
  - 3. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements such as size, weight, durability, performance and visual effect.
  - 4. Coordination information, including a list of changes or modifications needed to other parts of the Work that will become necessary to accommodate the proposed substitution.
  - 5. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
  - 6. Cost information, including a proposal of the net change, if any in the Contract Sum.
  - 7. Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.

## PART 2 - PRODUCTS

### 2.1 SUBSTITUTIONS

- A. Conditions: The Contractor's substitution request will be received and considered by the Governing Authority when one or more of the following conditions are satisfied, as determined by the Governing Authority; otherwise requests will be returned without action except to record noncompliance with these requirements.
1. Extensive revisions to Contract Documents are not required.
  2. Proposed changes are in keeping with the general intent of Contract Documents.
  2. The request is timely, fully documented and properly submitted.
  3. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
  4. The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
  5. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  6. A substantial advantage is offered the Government, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Government may be required to bear. Additional responsibilities for the Government may include additional compensation to the A/E for redesign and evaluation services, increased cost of other construction by the Government or separate Contractors, and similar considerations.
  7. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
  8. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.

9. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.
- B. The Contractor's submittal and acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01631